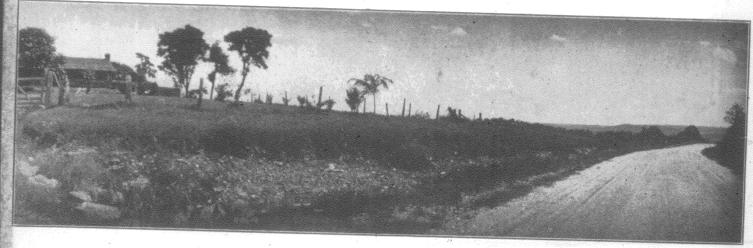
# ARKANSAS HIGHWAYS



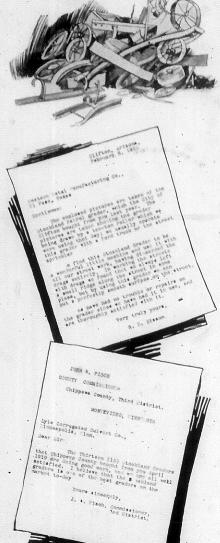
Pleasant Roads Through a Pleasant Land

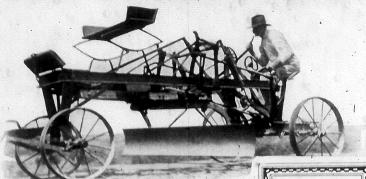
VOL.1

MAY 1924

N0.5

# Replace the "cripples" with Stockland DEPENDABLES





Are you operating graders that cost more to use than their work is worth?

When a grader can no longer work efficiently "junk" it. That is the wise thing to do. There's no use tossing operating funds into the bottomless pit of inefficient results.

Stockland Quicklift Graders are built to work longer. Long life is built into each and every part.

This book has helped 55,000 road officials and engineers.
Send for YOUR COPY of the new edition.

Repair costs are cut to practically nothing.

The Quicklift lever saves an average of 17% in actual grading time.

The Built-in Steering Device negotiates the sharpest turn with operator in full control of the front wheels.

The Cutting Blade and Curved Moldboard give larger, faster earth-moving capacity by cutting under and rolling the earth.

All-steel Gears, one-piece, hot-riveted Frame, non-slewing wheels, easy and convenient operator control.

For heavy construction, clean ditching, intensive maintenance—every type of road job has a suitable Stockland Quicklift.

Stockland Service—less than 12 hours from anywhere in the Country.





# Roads That Go Somewhere'

### Official Monthly Bulletin of the State Highway Commission Paul Grabiel Editor

"Arkansas Highways" is edited in the offices of the State Highway Department at Little Rock. Communications relative to advertising or articles and photographs submitted for publication should be sent to The Editor, care Highway Department, Little Rock. The bulletin is sent free of charge to State and County officials, newspapers of the State and Road Commissioners who apply for it. Permission to reprint any matter contained in "Arkansas Highways," with proper credit, is hereby granted to all newspapers of the State,

VOL. I.

MAY, 1924.

NO. 5

# A History of the National Military Roads in Arkansas

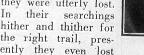
Written Especially for Arkansas Highways by Dallas T. Herndon.

Editor's Note-It is with pleasure that we are able to give this month to readers of Arkansas Highways the first installment of Mr. Herndon's picture of the early road building which had so much to do with the development of our State. Mr. Herndon, who is secretary of the Arkansas History Commission and a lifelong s'udent of the matters of which he writes, has sketched this picture at our request, in leisure moments, in order that the road builders and boosters of the present may gain a new perspective of the foundations of the State-wide system now happily nearing perfection, after many vicissitudes, both physical and political. We are sure that it is a very valuable contribution to the literature of the day, for which our readers will thank Mr. Herndon from the bottom

Two horsemen, well and equally mounted, rode out of Little Rock one fine day in July to go to Memphis, Tennessee, bent on an errand of pressing importance. They went, says a report of their adventures, under strict orders to go and return as fast as eight stout legs could bear them. ( Meeting with nothing in the course of their journey thither notably to hinder their progress, in due season they arrived safely enough at the then village of Memphis. The dispatch of the business which had taken them thence was there got through quite as quickly as two tired horses had had a scant space for a breathing spell.] But one or two days after that upon which they alighted found the travelers again in the saddle, content and glad of an errand successfully performed, and, perhaps, all the more eager to put the last mile of the journey to Little Rock safely behind

On the homeward journey all went well for the first day out. Evening found them again at a point on the road familiar to all those who, not so long since, had passed that way as the place of the "Sixty-Mile Tree"—that is, sixty miles distant from Memphis. There the more or less plain, open road, building then from Memphis westward, came to an abrupt ending. Thence westward to Little Rock, the

road was nothing more nor less than a faint and winding trail, only just what now and then a traveler had made it by following in the footprints of others. But the two eager horsemen, in spite of uncertainties at nearly every turn of the path, felt now at ease and fully assured of themsélves; so that in hastily picking and choosing the trail, at length where once too often it parted in the middle, the half they elected to pursue led them shortly into evil wayswhither they knew that they were utterly lost. In their searchings the right trail, pres-



ently they even lost Dallas T. Herndon. track altogether of each other; they were indeed so effectually lost to each other as never to meet again in what now remained of their journey homeward.



One of them, who, after meeting with no end of difficulties, succeeded finally in his efforts to regain the trail sustained no material lesses other than that of his saddle; that, according to the story, was claimed as toll by the briars. Of the other, the narrator says that he "fared far worse." He had begun by pursuing a course exactly the op-(Continued on Page Seven.)

## Where Shall We Locate The Trunk Highways?

A General Discussion of Highway Location, by A. R. Losh, Federal District Engineer.

In the consideration of a highway improvement project there is a general tendency to assume the location as predetermined by existing roads, local improvements, rightof-way lines and other similar factors. Furthermore, it is customary to proceed with road improvements along existing lines, making only minor corrections in alignment to secure easier curves and grades. To assume definite terminals and intermediate control factors and, from these, determine a public highway location is an unusual procedure, except perhaps in the undeveloped mountain and forest regions of our Western states, in fact, it appears to be the established practice among highway engineers to accept existing roads as the practical and feasible lines for new highways which are designed to serve vastly larger interests than were the old roads laid out by a previous generation. The public has not yet awakened to the fact that highways fill a large part of our modern transportation scheme and that their location should be considered from the viewpoint of economical service to the public. The subject of location receives very little mention in most text-books on highway engineering, the technical writer apparently accepts the viewpoint that location is largely determined by such local factors as:

1. Cost of new rights-of-way.

Substantial existing improvements along the present roads which must be given direct service on the new highway.

3. Limited amount of funds and the small yearly progress which makes piecemeal construction necessary, thus

preventing extensive relocation.

4. The use of local funds.

5. The local political considerations.

It is to be admitted that for roads serving purely local interests wherein the traffic is confined to the immediate locality, consideration should be given to all these conditions, but, where the use of the highway is general and by interests over a large area, then the effect of local factors

should be reduced in proper proportion.

With the large construction program we have in this country, we should carefully weigh the merits of each proposed project and then plan for its development in line with the service it is expected to perform. One of the first steps, therefore, is to determine the prospective use of the highway. This determination will permit us to fix upon those factors or conditions which should be the controlling influence in locating the highway. The uses of highways place them in the following general classes:

I. Primary State Highways-

(a) Serving as a transportation line or as a major connection between metropolitan areas.

(b) Serving a number of important cities or industrial centers, which in effect, form a series of controls along a continuous route.

(c) Serving as an important through route for long distance traffic including interstate connections.

2. Secondary State Highways-

- (a) Serving as connections from town to town and county to county providing intrastate service.
- (b) Serving as intercounty transportation line, or as cardinal line to important city.
- (c) Serving as tourist and pleasure roads.
- 3. County Roads-

- (a) Serving intracounty political, social and commercial interests.
- (b) Town and city market roads.
- (c) Mail delivery routes.

Community Roads—

- (a) Serving the local needs for the schools, churches and community center.
- (b) Serving local industries and agricultural interests as feeder lines to main roads.

It is evident that the same conditions should not similarly affect the location of all classes of highways. For Class 1 (a) roads not only should we have high type construction with substantial and adequate roadways, easy grades and good alignment, but we should also have as nearly as practicable direct location between terminal points with distance reduced to a practicable minimum. We should be primarily concerned with providing a traffic way for a large number of motor vehicles moving to or from a common terminal and should consider the tributary traffic of minor importance. Since the time interval between terminals is of major importance, the location should be with the view of reducing distance and the design for safety and speed. For such a highway the local factors previously mentioned should have very little influence.

In sharp contrast with these conditions consider those which apply to Class IV (a) road. In this case practically all the traffic originates in the community and in consequence, there is not the element of danger from road intersections, sharp curves and restricted vision as would be the case if foreign traffic were involved. Distance is not the important factor that it is in Class 1 (a) roads for the reason that indirect location is often desirable in order to serve a greater population Existing improvements and other local considerations are of considerable moment and if local funds are largely used in financing the improvement, the local tax-paying public should be consulted in the location.

Between the Class 1 and Class IV highways, we have a wide variation in the character of service to be provided. It logically follows that we should have some variation in the type of roads and the factors fixing their location. Both the location and the construction features should be determined on the basis of future traffic requirements, but we cannot establish fixed conditions of control for all highways.

In order to permit consideration of this subject in a general way, the further discussion will be restricted to Class 1 and II highways as it is upon these classes that the professional engineer is usually employed at the present time. Every State now has a State Highway Department and there has been determined for each state a system of highways which includes Class I and II and in some instances part of Class III roads. For the greater portion of the country these State Highway Systems have been determined in a tentative way only, and since only a small portion of the mileage has been improved there exists an opportunity to effect economic location of the roads if the engineer and the highway official will work with this end in view. Much of our construction work at the present time is looked upon as a progressive stage of highway development, but this idea should not apply to the location which can be se-

(Continued on Page Sixteen.)

### Highway Builders May be "Cussed" for Awhile, But Honor Finally Comes

An Interesting Letter From Former Arkansan on Experiences in Ohio.

Columbus, Ohio, May 8, 1924.

Editor, Arkansas Highways, Little Rock, Ark. Dear Sir:

As one who has had the former pleasure and honor of living in Arkansas, who knows the value of good roads, and the travail through which they are usually secured, I want to tell you how much I have enjoyed reading your splendidly edited monthly bulletin, and how sincerely I am gratified over the rapid progress you are making along the right lines in the highway program in the "Wonder State."

I can read between the lines and see that you have had to overcome a substantial group of knockers and kickers who, if they had their way, would obstruct all sorts of constructive activities for selfish or shortsighted reasons. In this connection, I believe an experience of my own may be interesting and enlightening.

I was in the insurance business in one of the north-western counties of Ohio, and like many others, finally got tired of trying to drive through mud which stuck to the wheels and accumulated so fast I had to stop every little ways and knock off a small-sized farm. So I went to the then county auditor and asked him for a petition for good roads. He gave be a blank under what was then termed the "two-mile assessment pike" law. Getting quite a number of signers, I turned it in to the auditor, thinking he would finish the job and we would at last have some good roads in our county. For some reason, however, perhaps political, the matter was never heard from.

Nothing daunted, and still being an advocate of good roads, I ran myself for county auditor and was elected. When I took office I found my two-year-old road petition sadly neglected in a dark pigeon hole. Taking off my hat

I made a vow that if my efforts could bring it about, we would still have good roads in that banner farming county.

At last, despite many kicks, threats and loss of personal friends, especially within my own Democratic party, I finally put the thing through. Then began a procession of farmers through my office. In spite of the fact that for years they had been getting stuck in the mud in trying to bring their crops to town, they came to the auditor's office and told me what they "were going to do to me" and even the noble editor of the local paper took a hand in the melee. However, I went ahead, and the roads were finally finished and accepted, one of gravel and the other of stone. Unfortunately, though, the roads were not opened for general use until after the writer had made his campaign for a second term and the boys were as good as their word, and "got my scalp."

But, oh boy, even though I had gone down to defeat, it was a beautiful sight to see these fellows coming in in the spring, after they began to appreciate the good roads, and apologize to me for what they had done. It was almost amusing to hear their apologies, and their plans to recompense me some way and give me the glory, which they did, making me run again for auditor, and piling up the votes for me until I was almost ashamed of my own majority.

So just keep this experience of my own in mind, and though you and those who are working with you in an honest effort to lift Arkansas out of the mud are being cussed and condemned and lied about, keep right on hammering, and when the real benefits of your work begin to soak into the public mind, folks who have opposed the program will fall over one another trying to do you a good turn and reward you for your foresight and courage.

So, good luck to the Highway Department, and success to old Arkansas!

A. T. FLOYD.

### Chicot County Working Hard for New Inter-State Road

Commissioner Wilson Confers With Committee Over Plans.

Chicot county people, and particularly the citizens of Lake Village, are working enthusiastically on plans for the continuation of the recently surfaced highway from the Village to Luna Landing on through to the Leland Ferry, through which the splendid Arkansas-Louisiana system, and through it the entire State, will be "tied in" with surfaced Mississippi roads which will bring thousands of tourists into the section.

The value of the proposed highway to the ferry connecting Chicot county with a net work of hard-surfaced roads in Mississippi, may readily be understood when it is shown that at present there is no satisfactory crossing of the "Father of Waters" for the automobile tourist between Memphis and Vicksburg. The proposed link would provide a new crossing between these two points, and would divert much transcontinental travel into Chicot county, with incidental benefits to the entire State.

With so beautiful and renowned a fishing resort as Lake Chicot made accessible from across the Mississippi, thousands of tourists would be making at least a side-trip to spend a few days there, and incidentally pick up much new and valuable information about the State of Arkansas, her roads and her progressive citizenship.

Commissioner Herbert R. Wilson recently conferred in Lake Village with a committee consisting of County Judge Harry E. Cook, Ed L. Davis, J. R. Yerger, W. H. Baird, C. P. Wilson, Sam Epstein and others relative to the possibility of working out plans for the continuation of the road from its present end at Luna. Mr. Wilson was much impressed with the need for the road, and under his direction the department is working on plans through which it is hoped to make provision for the project.

#### THE GLEASON CUT-OFF.

Conway, Ark.—Under the supervision of Engineer Holderbaum of the state highway department, work has been started on the repair of the road between Cadron Gap and Gleason, a section of the trans-state highway between Fort Smith and Little Rock, which has been almost impassable to automobile and wagon travel for the past three weeks or more. Mr. Holderbaum placed a crew on the road and there will be no let up until it has been made into condition for traffic.—Arkansas Gazette.

# Grant County District High in Praise of Maintenance Work

Board Adopts Resolutions Turning District Money Over to Highway Department.

Another convincing proof of the satisfaction which the people of the State are feeling over the operation of the new state-wide highway law under the direction of the State highway department came May 2 when the Board of Commissioners for Road Improvement District No. 1 of Grant county voted unanimously its appreciation and approval of the "splendid work" of the department in road maintenance, and turned over \$3,000, the balance of the district funds, to the department to assist it in carrying on the work in

The resolution, which is given herewith in full, is gratifying to the State highway commission, not only because it will materially assist in the maintenance work in Grant county, but because it evidences that spirit of co-operation on the part of the citizenship of the State that is so necessary for the complete success of the present drive for

"Roads that Go Somewhere."

Text of Resolution.

"WHEREAS, Road Improvement District Number One of Grant County, Arkansas, by its board of commissioners, J. M. Nall, J. L. Butler, R. N. Caldwell, A. V. Hope and O. T. Johnson, all of said board of commissioners being present, held a meeting at T. Nathan Nall's Law Office at Sheridan, Arkansas, this the Second day of May, 1924; and

WHEREAS, Heretofore said Road Improvement District Number One of Grant County, Arkansas, had collected the approximate sum of \$3,000 as a special fund for maintenance work on the said road, and they desire that same

be used for that purpose; and

### HOPE PLANS GOOD ROADS DRIVE.

Innoculated, apparently, with the same virus that has swept Lee county this spring, as related in the April number of Arkansas Highways, the people of Hope and vicinity recently held a good roads meeting at which preliminary plans were adopted for the construction of two permanent highways leading out of the city, one to Lewisville, county seat of LaFayette county, and the other to the Nevada county oil fields.

W. Y. Foster, Sr., of Hope, member of the State highway commission, and Richardson Ayres, State highway engineer for the Hope district, were the principal speakers, discussing the machinery provided by the new State-wide highway law for the construction of such roads when a majority

of the people favor them.

The sentiment of the meeting was unanimous in favor of the proposal, and L. A. Foster, chairman of the meeting, appointed a list of committees to go over the proposed routes, and confer with the landowners involved, to ascertain their desires.

#### TRANSFORMING THE COUNTRY.

The work on the highway is progressing nicely and the hum of the old tractor makes us look out over our little valley and wonder if it's really the same place we have lived for years.-Walnut Valley Correspondent of the Russellville Courier-Democrat.

Courtesy is the eye which overlooks your friend's broken gateway, but sees the rose which blossoms in his garden.-Florida Highways.

"WHEREAS, The State Highway Department has been doing splendid work in Grant county in maintaining the roads of Grant county, and we as said board of commissioners appreciating the kind and class of work being done and feeling that the Highway Department with its official method is in a better position and more capable of expending said money to better advantage than we as said commissioners; and

THEREFORE, Be It Resolved by the board of commissioners of Road Improvement District Number One of Grant County, Arkansas, that the president and secretary of said board are hereby authorized to draw warrant upon the funds of said district in the sum of \$3,000 in favor of the State Highway Department of the State of Arkansas, District Number Six, and said sum to be placed in the Grant County Bank to the department's credit and to be paid out to it upon vouchers or checks drawn by R. A. Kern, District Engineer, for work done on said Road Improvement District Number One of Grant County, Arkansas, and a copy of which resolution be furnished the Grant County Bank and the State Highway Department.
(Signed) "J. M. Nall, A. V. Hope, R. N. Caldwell, J. L. Butler and O. T. Johnson, Commissioners."

#### GOOD ROADS AND "DRUMMERS."

Since navigation has been opened up, the drummers in their Fords are showing up.—Maberry Correspondent of the McCrory Leader.

### The New Highway Law

IS GIVING US

GOOD ROADS



PARKE-HARPER PUBLISHING CO.

can give you

Good Printing

209 Spring St.

Little Rock; Ark.

## Western Arkansas to Celebrate Winslow Mountain Opening

Big Program Under Auspices of U. C. T. to Be Staged June 14.

The citizenship of all of western Arkansas, and commercial travelers of the entire State, will participate in the all-day picnic and barbecue with which the opening of the road over Winslow mountain by the State highway department will be celebrated June 14 at Skyland Park, three miles south of Winslow on the Washington-Crawford county line.

Long a bugaboo to the motorist, impassable during a large part of the year, the Winslow road, through co-operation between the State highway department and the business and civic leaders of Fort Smith and vicinity, has been transformed in the past few months into a comfortable all-year roadway, which makes the Sebastian county city easily accessible to all northwest Arkansas at all seasons of the year.

The opening of the road is an event long awaited, which will be celebrated with much enthusiasm. The celebration will be under the immediate auspices of the United Commercial Travelers' Highway Committee, which is arranging a program which will include music, speeches and a baseball game.

Commissioner Herbert R. Wilson, Engineer R. C. Limerick and other officials of the highway department have been invited to attend, and will have places on the program.

#### BUILD GOOD ROADS.

Gone are the days when "any road" would do, Gone are the day when oxen pulled 'em thru, Gone are days when devilish Fords were few, I hear those voices loudly calling:

"Build GOOD Roads."

We're coming, we're coming to the day of modern loads.

I hear those voices loudly calling: "Build GOOD Roads."

Gone are the days when mud was right in style, Gone are the days when three hours meant a mile, Gone are the days when "highways" were a trial, I hear those voices loudly calling:

"Build GOOD Roads."

-Georgia Highways.



### VOSS-HUTTON COMPANY

Wholesale Distributors

Automobile Accessories and Garage Equipment



### DISTRIBUTORS

**Hi-Speed Rings** 

Timken

Weaver Equipment

Klaxon Horns

Hyatt

South Bend Lathes

Walden Wrenches

LLyuce

Billings & Spencer Wrenches

New Departure

Raybestos

Bearings

Wright Hoists—Trolleys

214-16-18-20 West Fourth Street.

Little Rock, Arkansas.

Long Distance Telephone. 4-0433, 4-0434

### A LONOKE COUNTY STRUCTURE.



A joy to the eye are the lines of the above concrete bridge in Lonoke county, constructed under the supervision of the State highway department, as a part of State High way "A-1," running from Memphis to Little Rock.

It is interesting to note that this highway, one of the most important in the entire State system, follows the lines of the first road ever built in Arkansas, a national military highway, described in the series of articles by Dallas T. Herndon on early military roads, the first of which is contained in this issue of *Arkansas Highways*.

In the days of which Mr. Herndon writes so interestingly, the bayou shown above had to be swum by the mounted couriers of which he tells. Nowadays the luxuriously appointed auto of the tourist, or the noisy "flivver"

of the local "drummer" do not even hesitate as they zoom across on solid concrete.

#### HIGHWAY PUBLICATIONS.

Twenty-five states now get out monthly or weekly publications in the interest of highways. Arkansas, California, Florida and Utah have recently added interesting publications to the monthly list. All states are beginning to realize the urgent need for a publication of this kind in order that the people may be kept informed with accurate and reliable information regarding the activities of the State Highway Department. Such publications are both interesting and instructive. We congratulate these last four states on this forward step.—Texas Highway Bulletin.

### INDEPENDENT CHAT

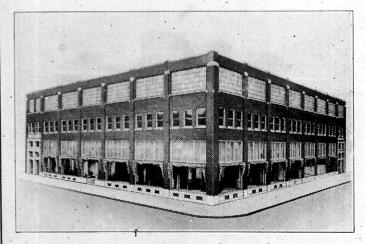
for

MAINTENANCE and GARPET WORK

Our Special SCREENED CHAT is best for this work.
Producers Crushed Limestone and Flint.

INDEPENDENT GRAVEL CO.

Joplin, Mo.



# To the Progressive Citizens of Arkansas:

Your friendship has made possible the wonderful new home of

"The Arkansas House"
Come in and Look Us Over.

# Democrat Printing & Lithographing Company

"The Art Metal Store"

Second and Scott Streets

Little Rock, Ark.

### A HISTORY OF NATIONAL MILITARY ROADS.

(Continued from Page One.)

posite from that of his companion; had found himself next in the midst of the swamp which lay between the prairie and the Arkansas river; there he had wandered about in aimless bewilderment, scouring the wilderness in vain for a path or habitation from Tuesday morning until Friday. After three days of such wandering, he was all but reduced to starvation, having nothing to eat but a few blackberries, two or three crawfish—eaten necessarily raw—with now and then a handful of sassafras leaves by way of seasoning the rest of his repast. Nor was this all. He had lost his horse, saddle, bridle and hat; of his clothing the briars and bushes had taken such liberal toll that he scarcely had wherewithal to cover his nakedness, when, on hangman's day, he arrived at the house of a settler, distant but ten or twelve miles from the village of Little Rock.)

This story has about it a flavor of that which makes it seem in a manner overdone. That it is something of the latter in some non-essentiels is perhaps true; but the circumstance and occasion of its appearance in the Arkansas Gazette, avouched by the editor himself, is ample proof of its truth in the main. And that the two hasty horsemen, after having lost themselves, had turned up at Little Rock in very sorry sort, is not in the least to be doubted.

This story of the two discommoded horsemen happened in July of 1827. What then of the road-the open road building at the moment-whence the two travelers pursued their journey from Memphis for a space of sixty miles, seemingly without a false step? Of a multitude of things perhaps worthy of observation, naturally the question which at once arises is of how it fell out that the road should have ended where it did. Hitherto, until in this the eighth year of the Territory of Arkansas, overland travel in all this region had had for the most part only instinct to guide it. Thus far the Arkansas country had lain hardly touched at all in one vast wilderness destitute of signs or traces discernible to the eye as a guide to travelers, unless it be to woodsmen bred in the very lap of nature's native Woe betide the traveler wanting the woodsman's instinct-a sort of indefinite sixth sense, seemingly a peculiar gift of savagery and the beasts of the field-for feeling, as it were, one's way in and out and through such a jungle as confronted there and then the traveler. Now, however, the year just mentioned saw the beginning of roads a-making by really purposeful impulse and effort. This single and continuous stretch of sixty miles reaching out westward from Memphis was, in July, 1827, the first of such enterprises seriously to be undertaken. Those who were set to the task of clearing out a right-of-way through the dense obstructions of underbrush and timber had proceeded by explicit instruction and previous surveys, starting back at the brink of the Mississippi river.

Thus were begun those early, pioneer highways known traditionally as military roads. Though the name, as later will appear, was not altogether misinforming, nevertheless it affords but little or no clue to the vitally significant effect in that day of the making of a road leading into the interior. One ventures to assert that the story of the horsemen, without other matter, is far more illuminating, as regards the effect of the road upon the settlement and what not of the country, than would be a full account of all the military uses it was ever put to in its time of greatest utility as a military road.

The cutting out only of just so much of it—from Memphis sixty miles westward—seemed assuredly an achievement marking the advent of an epoch. Hitherto had lain, as it were, across the very front door of Arkansas Territory, a barrier of all but impenetrable swamp country, spread out in one broad belt varying in width from ten to fifty miles



or more. Finally, from north to south, the baffling obstruction filled almost the whole doorway, extending from and beyond the Missouri state line to and into Louisiana. Immigration hitherward had, prior to the time of the erection of the Arkansas country in a separate territory, avoided this dense and dismal march of overflow land; had swept around to the north or south as the case might be.

(To Be Continued Next Month.)

# Russell Badger Grader A Light Standard — Combination Scarifier

Scarifier and Grader in one unit. A medium size machine most suitable for work in city or township and requiring 4 to 6 horses or 8 to 12 h. p. Tractor.

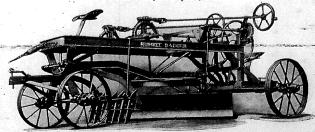
The Badger may be equipped with scarifier ahead of blade and both worked in combination or may be worked with scarifier detached. A 6½-foot blade is recommended when worked with scarifier and a 7-foot without scarifier. An 8-foot maintenance blade is also supplied if desired. Width of blade 15 inches, thickness 5-16 inches, carefully hardened and polished. Furnished with detachable cutting edge. The Badger combination weighs 2810 lbs.

The complete Russell Line includes –8 Sizes Road Machines, 2 Sizes Elevating Graders, Maintenance Patrol Machines for both Motor and Horse Power, Scarifiers, Road Drags and Wheel Scrapers, Drag Lines, Gravel Screening, Crushing and Loading Equipment, Steel Beam Bridges, etc.

A very complete 68 page catalog of special interest to all road builders—sent free and postpaid.

### RUSSELL GRADER MANUFACTURING CO. OF TENNESSEE

489 Main St., Memphis, Tenn.



### Leaves From the Editor's Notebook

### "BRIDGING THE GAPS."

Our cartoon this month by Mr. Radcliffe will bring home to the reader very clearly the real gist and significance of the work which the highway department is doing under the new highway law.

It is "bridging the gaps" in the State system, so that no more will it have to be said that we get only partial use out of our good roads because of sections of bad road that become impassable during wet weather. It is "bridging the gaps" so that a man can get in his car at any time of the year and go the length and breadth of the State, wherever his business or his pleasure calls him, without waiting for a spell of dry weather, or without spending a young fortune being pulled out of intervening mud holes. It is "bridging the gaps" so that instead of a large number of beautiful, but isolated stretches of highway scattered throughout the State, we shall have but one great system of "Roads that go Somewhere."

Who has not traveled in Arkansas in the past over long reaches of sweet-running gravel, concrete or asphalt roadway, only to be brought to a halt by some short stretch of bottomless mud, truly reminiscent of the "great gulf" of the Parable, that lay between Lazarus and Dives in the Other World. Who has not sat, as the travelers in Mr. Radcliffe's picture are sitting, and gazed across the "gulf" at other tourists, also held up by the "gap?" And

who has not longed, in such a moment, to lift up his eyes and see such a figure as Mr. Radcliffe has portrayed, coming to the rescue with a real "bridge" for the gap?

Many of us have done just that, and for all of us this vision, which is being translated into actual fact by the State highway department, justifies, more perhaps than any other one feature, the new highway law under which the State now is operating.

"Bridging the gaps." That's what the zoom of the tractor in the quiet countryside, here and there all over Arkansas, really means to the long-suffering people of the State. That's what the clatter of the grader and the crunch of the drag mean. That's what the noise is all about. "Bridging the gaps." With such a vision in their minds, do you think the people of Arkansas are going to sell their present heritage of constructive achievement for a mess of political buncomb and clap-trap?

Not on your life! Even though it is a so-called "political year" and a whole regiment of bunk peddlers may be shouting their wares!



### GOOD ROADS AND THE STATE FAIR.

As these lines are written, the City of Little Rock, under the aggressive leadership of Mayor Ben D. Brickhouse, is plunging into a campaign to raise \$300,000 for a great State Fair.

One of the principal objectives is the laying out of an extensive fair ground on the beautifully wooded slopes lying west of the State Hospital for Nervous Diseases. The last two years have witnessed State Fairs

in Little Rock of much value to the State in an educational way, and entirely worthy of our resources. The new plans, however, are far more ambitious than any in the past, and among the factors that have seemed, in the eyes of the directors of the fair, to justify the increased expenditures, have been Arkansas' improved roads.

Although it is centrally located, Little Rock never before has been so easily and quickly accessible to the autoist from all parts of the State as it will be this fall under the operation of the new highway law.

When the State Fair is held this year it will be an easy matter for the farmer and his folks, virtually anywhere in the State, to pile into the old family "bus" and drive to Little Rock in a few hours, see the assembled wonders of the "Wonder State" and return home, the same day or the next, at comparatively no expense.

With free parking grounds and tourist camp sites, this will be the method of thousands, through which they will realize one of the extra "dividends" of the new highway system.

All of which will contribute to the upbuilding of our State, through the dissemination of wider knowledge and appreciation of her resources, and a more thorough understanding among the people of her various sections. For it is only through understanding that we reach that ideal co-operation so necessary in real empire-building such as that in which Arkansans now are engaged. "As we know each other better, we shall love each other more."

### REMEMBER OUR ADVERTISERS.

We hope our readers will not forget our advertisers, who, by their support, are making possible the printing and distribution of this magazine throughout the State without the diversion of road funds from their proper objective, and without the collection of any subscription charge from those who get the publication.

They are making it possible for those interested in good roads to secure prompt and accurate information about the progress of the State's road program, as well as for the State to be represented, in the State highway departments of all the other States of the Union, and on the reading tables of most of the public libraries of the country, by a publication calculated to correct many of the mistaken ideas that are prevalent about the culture and progress of Arkansas.

That is a great service, and one which the progressive citizens of the State should appreciate, at least to the extent of letting them know about it, and of patronizing them, all other factors being equal.

Remember our advertisers, boost their business, and when possible, show them there is a direct financial return on such patriotism as they have shown!

### "BEST CONDITION EVER KNOWN."

"All of the roads in this section are now in the best condition ever known," says the Batesville Guard of May 9, and it is an observation that is echoed throughout the State. Space does not permit the quotation of more than a very small percentage of the comments of a similar character which we read each week in the press of the State.

It is a tribute that comes from editors who climb into their cars, or their neighbors' cars, occasionally, and drive out over the roads of their section to compare them with previous conditions. There is no theory about it. The proof of the road is the riding. The improvement is there, and without any increase whatever in the bonded debt of the farmer and landowner.

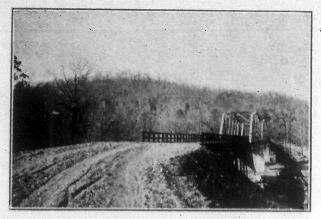
And so, from honest hearts, and honest pens, recording honest sentiments, in which there is no color of politics or partisanship, we have the verdict, "best conditions ever known."

### OUR FRONT COVER.

For our front cover this month we have selected a typically beautiful stretch of countryside along the Little Rock-Fort Smith highway between Ozark and Mulberry. Truly it is a "pleasant road through a pleasant land."



### BRIDGING THE BEAUTIFUL CADDO.



Far-famed are the beauties of the Caddo river, thanks to the facile and persistent pen of Graham Burnham, assisted by other enthusiastic Pike county citizens, who love to tell the story in season and out of season.

All these beauties, however, fail to land the tourist unless they are safely and comfortably bridged for automobile traffic, as has been done in the above structure at Glenwood. The bridge, with its comfortable and well-laid out approaches, was opened to traffic recently, having been constructed under the supervision of Richardson Ayres, district engineer of the State highway department, and with half its cost being borne by the federal government. It will adequately serve all traffic needs at this point for many years.

### NORTH ARKANSAS WELL ORGANIZED.

The State Highway Department is getting its forces well organized in the north part of the State and men are at work on nearly every section of state roads. All the way east and west from this place and north to the Missouri state line highway construction squads are at work. Already a noticeable improvement has been made. The roads are divided into sections the same as a railroad, with a crew to each section. Grading is in progress on some stretches, but the principal work at this time is dragging and draining. The work is being done very thoroughly. After the roads are dragged the section men come along with rakes and take out the larger rocks, which leaves a smooth hard surface. A six-mile grading contract has recently been let on the road leading from this place to Henderson, a link between Mountain Home and Salem. Grading is in progress in Marion county and the road leading from Yellville toward Harrison. The bridge across Crooked Creek has been completed and work is being done now on the approaches. Crews are at work on the Jefferson highway leading through Boone county from Western Grove. Some grading is being done, new culverts are being put in, and dragging is in progress all along the route. The same kind of work is being done on the road leading from Berryville to the Missouri line near Blue Eye.-Mountain Home Bulletin.

#### WHERE THE BLAME LIES.

"Carelessness, corn whiskey, inexperience and faulty brakes were responsible for the majority of the accidents reported to the state highway department during the past month by road patrolmen in all sections of the state, according to a statement by Herbert R. Wilson, state highway commissioner, appearing in the current issue of *Arkansas Highways*, official publication of the department," said a news story in Wednesday's editions of the Democrat.

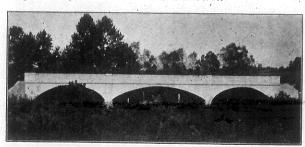
The careless or reckless driver led the list, causing more than half of the serious accidents, we are told, while the man with the booze-muddled brain ran a close second. The inexperienced driver ranked third, while faulty brakes were fourth.

In an effort to correct this evil Mr. Wilson plans a campaign in which the following are the main objectives:

Straightening the dangerous curves or placing guard rails or danger signs; elimination of the incompetent, reckless or intoxicated driver through the forfeiture of chauffeur's licenses and prosecution of other offenders, and rigid enforcement of the traffic rules and regulations framed by the highway commission as "Safety First" measures.

The careless, the reckless or the drunken motorist has no place on the highways of the state. If the laws of fate demanded only the death of the fool who violated them, there would be little public demand for his elimination because eventually he would pay. But it is a tragic reality that the innocent man, woman or child just as often suffers.

Enforcement of highway regulations is just as necessary on the roads of the state as traffic ordinances are in the crowded cities. The fine cannot be too high, nor any other punishment too severe for the idiot who insists upon making a speedway out of the highways. The sooner Mr. Wilson's department puts a stop to the man who runs amuck in an automobile the more fervent will be the thanks of the good citizens who do not park their brains when they "unpark" their cars.—Arkansas Democrat.



Clear Creek Bridge in Washington County (Federal Aid Project No. 37)

# Built by the Luten Bridge Company OFFICES AT:

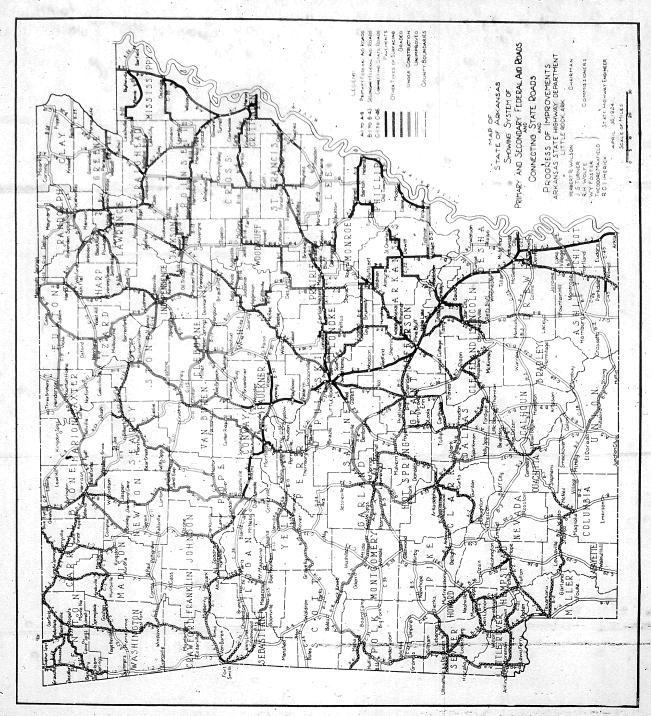
LITTLE ROCK, ARK. CHARLOTTE, N. C.

KNOXVILLE, TENN. DALLAS, TEXAS

Other projects of which we are proud in Arkansas may be seen in Crawford, Scott, Pope, Searcy, Garland and Hot Spring counties.

Plans and Estimates Furnished Free.
Write us about your problems.

Before You, Citizens of the "Wonder State," Are Your "Arkansas Highways!"



### PRESS COMMENTS

A drive over the Jefferson Highway from Mena to Two-Mile bridge, the 10 miles included in the first state maintenance section, can but bring much satisfaction to all interested. The big road is now, it is believed, in better condition than any time since its construction, certainly a real accomplishment when it is remembered the havoc of the floods of a year ago. After these floods there were sections where all the surface gravel had been washed off the road, and over much of it the crushed rock foundation was exposed. All this is now well remedied, and the only mark left of the devastating waters would seem to be the well-nigh wrecked bridge over Rock creek. \* \* \*

\* \* \* The contour of the road's surface is remarkably true and pretty, especially after having withstood the wear and tear of hard service and the floods of several seasons with no maintenance.

The permanent maintenance of the highway, it must be conceded, is in the application as the need becomes evident, of more gravel in place of that first used. The particularly pleasing thing is that such road material has been found and is available close to the highway and in our own county.

This regeneration of the highway has been accomplished under the direction of the State Highway Department under the terms of the Harrelson act. The actual work was done by W. J. Tucker and his crew, and certain it is that to Mr. Tucker much credit is due.—Mena Evening Star.

# Contractors', Road Builders' Equipment

Advance-Rumley Tractors Marion Electric, Gas Electric and Steam Shovels

Schramm Compressors Trenchers and Back

Fillers

Fuller & Johnson Engines Sand and Gravel Pumps Rex Mixers and Pavers

Clyde Hoists

Clyde Derricks

Steel Bridges

Concrete Carts and

Wheelbarrows

G. M. C. Trucks

Conveyers

### The Blaw-Knox Lines

Road Forms
Truck Turntables

Batcher Plants
Clam Shell Buckets

Steel Bins

Steel Buildings

Prompt Shipment!

### Joe Lyons Machinery Co.

112 N. Louisiana St.

(Marion Hotel Bldg.)

LITTLE ROCK, ARK.

# International Motor Trucks



Provide Low Cost Hauling for Users in Every Business.

Crankshafts and Main Ballbearings, Guaranteed Against Breakage During the Life of the Truck

International Harvester Company of America

300 Ferry Street, Little Rock, Ark.

### We Carry in Stock For Immediate Shipment

- -ROAD SCRAPERS
- -ROAD PLOWS
- -ROAD FRESNO
- —ALL SIZE CHAIN SHOVELS-

SCOOPS AND GENERAL

LINE OF

ROAD MATERIAL

# FONES BROTHERS HARDWARE CO.

Little Rock, Ark.

### HOT SPRINGS CONTRACT RE-LET.

Following the recent cancellation of the contract held by the Oliver Construction Company, the Little Rock-Hot Springs highway commissioners last week re-let the job for the completion of the proposed highway from the Pulaski county line through Saline and Garland counties, to the Houston Construction Company of Houston, Texas, and the Koss Construction Company of Des Moines.

The figure was \$1,175,000, or \$250,000 higher than the previous bid of the Oliver Company, which was conceded to be too low, in view of changed conditions in material costs and labor since it was originally made several years ago. The two new companies are expected to begin work immediately, and push the project to completion by January 1.

As this is written, there is a temporary tie-up, due to the demands of gravel pit owners for 25 cents per yard, which Federal engineers will not approve. However, the demands are thought to have resulted from a misunderstanding, and the old price of 10 cents probably will be restored, and the work started before the ink is dry on these lines.

Contract for the bridge substructures was awarded to the Oliver Company, at \$61,171, and for the bridge superstructures to Leroy Johnson of Joplin, Mo., at \$16,106.87.

#### IN MEMORIAM.

Here lies the body of "Stubborn Gray;"
Who died maintaining his right of way.
He was right, dead right, as he sped along,
But he's just as dead as if he'd been wrong.
—Florida Highways.

ARKANSAS HIGHWAYS CAN NOW SECURE EFFICIENT AND ECONOMICAL CONSTRUCTION SERVICE THROUGH THE RECENT COMBINATION OF GREGORY & WILSON

who own and operate more road building machinery than any other firm in Arkansas, with the Southern Sand Company operating the largest sand producing plant in the State.

There is no longer any question regarding the value of good roads when economically and properly built to meet required conditions. Combining the material production with the construction end of the business tends toward economy.

# SOUTHERN MATERIAL AND CONSTRUCTION CO.

624-27 Southern Trust Building LITTLE ROCK, ARK.

A. C. BUTTERWORTH,

President.

J. A. GREGORY,

Vice President.

CHAS H. MILLER,
Vice President.
R. S. WILSON,
Secretary and Treasurer.



### **CLOSE AT HOME**

This 36-inch 14-gauge ARMCO Culvert was installed in Pulaski county, near Scott, Arkansas, in 1908. It was inspected and photographed in June, 1923, and found to be in perfect condition in spite of its slight protection from heavy traffic and the water which stands in it at least nine months out of each year.

After sixteen years of service this ARMCO (Pure Iron) Culvert has not only proven its rust-resisting qualities but it has proven its strength and ability to give years and years of service under adverse conditions.

There are thousands of other installations under varying conditions which prove that ARMCO Culverts are just as permanent as any roadway that can be built.

M A D E IN ARKANSAS BY ARKANSAS PEOPLE

# THE DIXIE CULVERT MANUFACTURING COMPANY

LITTLE ROCK, ARKANSAS

### PRESS COMMENTS

The maintenance men on the Salem and Viola highway have been doing some excellent work lately, and altogether this is now the best stretch of highway in the county. It is very much appreciated by motorists, and dozens of cars make this drive on afternoons and Sundays now, just for the pleasure the occupants have of driving over the smooth road, and through the forest of majestic oaks, dotted here and there with the blossoms of the beautiful red buds, sweet scented haw trees and wild plum and a profusion of dogwood blossoms.—Salem Banner.

Under the Harrelson act, which is the only law in Arkansas now under which roads can be improved, the state is boss of all road jobs on first and second class roads. The state will not spend money on a narrow, irregular roadway. Then it follows that the first thing to do is to secure adequate right-of-way and this should be done before the people build good houses and barns jam up to the roads. Right-of-way is the first essential to good roads.—Monette Sun-Times.

#### RUSHING THE GAME.

Ford agents are bothering M. C. Alexander so much he can't hardly work the road.—Concord Correspondent of the Heber Springs Headlight.

Lay off, fellows, until the highway is completed.—

Arkansas Gazette.

### PITTSBURG TESTING LABORATORY

Inspecting Engineers and Chemists

INSPECTION OF—

Bituminous Pavements

Cement

Steel

Cast Iron Pipe

Chemical Analysis and

Physical Tests.

27 Urquhart Bldg.

Little Rock, Ark.

# STEEL

# FOR BRIDGES AND BUILDINGS

### REINFORCING BARS

Over 500 tons in stock for immediate shipment.

"One Piece or a Carload"

### Arkansas Foundry Company

1500 E. 6th St.

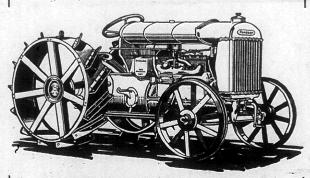
Little Rock, Ark.

"We Can Repair or Duplicate any Piece of Road Machinery"

### SEE US FOR

### TRUCKS AND TRACTORS

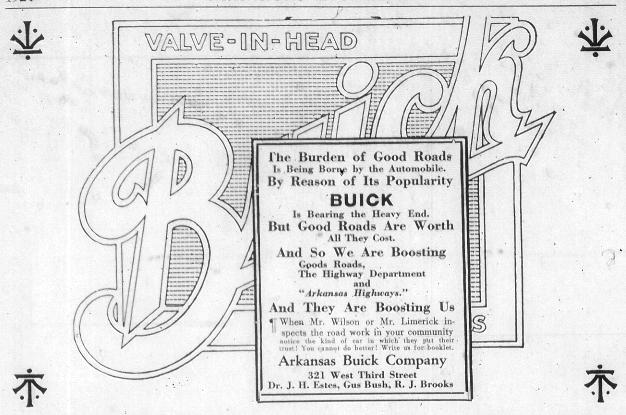
FOR ROAD WORK



### SHOEMAKER-BALE AUTO CO.

Oldest and Largest Ford Dealers in This Territory.

601-607 W. Markham St. Little Rock, Ark.



# Holt "Caterpillar" Tractors

CATERPILIA

CATERPILIA

Immediate shipment on 2-Ton, 5-Ton and 10-Ton "Caterpillars" from Little Rock or Memphis Stock

Attractive propositions on REBUILT 5 and 10-Ton "Caterpillars." 10-Ton "Caterpillars" for Rent.

OUR LITTLE ROCK OFFICE: GLEASON HOTEL John G. Livar, Manager

# Halloran Tractor Company

MEMPHIS, TENNESSEE



#### PRESS COMMENTS

These highways are to be constructed with funds raised by the tax on gasoline and the automobile license and without a cent of cost to the average citizen here, and after completion they will be maintained in the same way. Therefore, no one should throw obstacles in the path of progress when it comes in such beneficent form, but rather lend a helping hand where possible, that we may merit the good fortune bestowed upon us. St. Paul Mountain Air.

### WHERE SHALL WE LOCATE TRUNK HIGHWAYS?

(Continued from Page Two.)

cured earlier and cheaper now than in the future after the

country has developed along definite lines.

The general location of State highway routes is determined by the service to be provided. Where there develops long distance traffic to and from some distant objective, the general direction of the route will be influenced by this traffic, but in most cases the route will be laid out to provide connections between important geographical and commercial centers and through centers of population. The traffic between these respective terminals is usually greater than the through traffic passing beyond the terminals, consequently the study of the route resolves itself into a studyof the several sections. The location is determined practically by independent sections between terminals. When the terminal points are determined, the problem of location consists of two major considerations:

The approaches to the terminals and necessary connections.

The control features between terminals.

Approaches to terminal cities should be laid out so as to permit the diversion of traffic to the several important parts of the city and also to other highways with the least possible confusion or mixing with the city traffic proper. City traffic in itself is already a problem of tremendous proportions and to disgorge the traffic of a number of state highways on the city traffic ways will seriously handicap the efforts of the city officials. The approach to the city should be such that there is possible a traffic diversion to several geographical parts of the city. It is desirable to make these divisions to:

(a) The retail section.

(b) The wholesale section.

(c) Railway and steamship lines. (d) Several residential sections, and

(e) Direction connections (preferably without the

city) with other important highways.

Few cities have street systems laid out so as to make such an arrangement possible for immediate construction; but in order to provide for such an arrangement in the fu-ture, the plans should be fully developed in co-operation with city and other public officials. It is advisable to secure the layout of streets and roads to accomplish the terminal connections even though the actual construction may be apparently many years in the future. This will prevent the use of land for private purposes with the resulting excessive costs later when acquisition is necessary. This is a feature of location upon which the engineer should allow some play to the imagination and look with vision into the (To Be Continued Next Month.)



# **That Outlives** the Bonds

The

Road

· The mileage of Concrete Roads is rapidly increasing year after year -because no other pavement stands up under punishment like Concrete.

Concrete Roads carry any kind of traffic indefinitely, practically without repairs. They have the maintenance built into them.

That is why Concrete Roads will outlive the bonds.

The Portland Cement Association has a personal service to offer individuals and communities. This service is designed to give you more for your money -whether you use Concrete or have it used for you.

Our booklet R-3 tells many interesting things about Concrete Roads Write this office for your copy.

### **Portland Cement Association**

Syndicate Trust Building ST. LOUIS, MO. A National Organization to Improve and Extend the Uses of Concrete OFFICES IN 30 CITIES

Property of the
ARKARSAS MISTORY COMMISSION
STATE CAPITOL
Little Mank, Arkanege

## The Small and the Great

By Charles Mackay

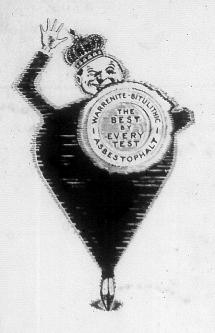
A traveler through a dusty road strewed acorns on the lea; And one took root and sprouted up, and grew into a tree. Love sought its shade, at evening time, to breathe its early vows; And age was pleased, in heats of noon, to bask beneath its boughs. The dormouse loved its dangling twigs, the birds sweet music bore; It stood a glory in its place, a blessing evermore.

A little spring had lost its way amid the grass and fern,
A passing stranger scooped a well, where weary men might turn;
He walled it in, and hung with care a ladle at the brink;
He thought not of the deed he did but judged that toil might drink.
He passed again, and, Lo! the well, by summers never dried,
Had cooled ten thousand parching tongues, and saved a life beside.

A dreamer dropped a random thought; 'twas old, and yet 'twas new; A simple fancy of the brain, but strong in being true. It shone upon a genial mind, and, Lo! its light became A lamp of life, a beacon ray, a monitory flame. The thought was small: its issue great: a watchfire on the hill It shed its radiance far adown, and cheers the valley still.

A nameless man, amid a crowd that thronged the daily mart Let fall a word of Hope and Love, unstudied, from the heart; A whisper on the tumult thrown,—a transitory breath,— It raised a brother from the dust; it saved a soul from death! O germ! O fount! O word of love! O thought at random cast! Yewere but little at the first, but mighty at the last!





# The King of the Black-Tops

says:--

"Years ago we could have stopped research and experiments, knowing our product to be surpassingly fine, but we knew conditions would change, and that our job was to anticipate the changes and keep ahead of every demand which would have to be met."

# Warrenite - Bitulithic Pavement

Is not alone a perfect pavement for today—it is the ideal pavement to lay with an eye to its performance years from now. Sturdy materials, proportioned scientifically, laid under expert supervision, blended with a shockabsorbing surface it forms a rugged unit that resists all weather and usage.

Our illustrated booklets are worth reading. We are glad to send them without charge.

## WARREN BROTHERS COMPANY

EXECUTIVE OFFICES BOSTON, MASSACHUSETTS

DISTRICT OFFICES

New York, N. Y. Portland, Ore. St. Louis, Mo. Winnipeg, Man. Harrisburg, Penn. Birmingham, Ala. Vancouver, B. C. Chicago, Ill. Phoenix, Ariz. Washington, D. C. Utica, N. Y. Minneapolis, Minn. Oakland, Cal. Toronto, Ont. Salt Lake City, Utah Memphis, Tenn. Los Angeles, Cal. New Orleans, La. Charlotte, N. C. Dallas, Tex.